



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/504,394	08/11/2004	Daisuke Hasegawa	09792909-5972	5100

26263 7590 07/26/2007
SONNENSCHN NATH & ROSENTHAL LLP
P.O. BOX 061080
WACKER DRIVE STATION, SEARS TOWER
CHICAGO, IL 60606-1080

EXAMINER

CAIN, EDWARD J

ART UNIT	PAPER NUMBER
----------	--------------

1714

MAIL DATE	DELIVERY MODE
-----------	---------------

07/26/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/504,394

Applicant(s)

HASEGAWA ET AL

Examiner

Edward J. Cain

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

Art Unit: 1714

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-18 and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites a process step at (e). Items (a)-(d) appear to be directed to an apparatus. It is unclear as to what statutory class of invention applicants are claiming.

Claim 4 recites a measurement means without reciting what is measured.

Claims 5-7, 12-16 and 18, by their recitation of specific materials and articles of used plastic make it unclear as to what statutory class of invention applicants are claiming. It is not clear whether applicants are claiming an apparatus, a process or a composition.

Claim 12 is further indefinite due to its' recitation of "salvaged under specific conditions" without defining what these conditions are.

Claim 17 recites, "said system is preliminarily provided". The term "preliminarily" is not understood in this context.

In claim 25, lines 6 and 7 are not understood.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 and 6-23 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Lieberman '713.

For the purpose of this rejection, claims 1-18 are seen as drawn to an apparatus, claims 19-24 are seen as drawn to products by process and claims 25 and 26 are seen as drawn to methods of recycling.

Lieberman '713 discloses polymer recycling methods and apparatus suitable for recycling and rejuvenating post-consumer plastic materials comprising a variety of polymers including ABS, SAN (AS), polycarbonate, polystyrene etc. and mixtures thereof (abstract and column 5, lines 10-54).

The methods are disclosed as comprising sorting, particulating, testing, addition of rejuvenating agents, extruding (melting), testing and certifying (column 5, lines 3-9 and Fig. 1). The apparatus is seen as comprising means for each of these operations.

Step (e) in claim 1 is seen as a method limitation in an apparatus claim and is therefore not given patentable significance.

The limitation "separates a resin" in claims 6 and 7 is seen as a method limitation in an apparatus claim and is therefore not given patentable significance.

The recitation of specific plastic materials in claims 13-16 and 18 is seen as describing an intended use for the apparatus and is therefore not given patentable significance.

The process limitations of claims 19-23 are not seen as imparting patentability to the products therein barring a showing of patentably distinct properties flowing therefrom.

Art Unit: 1714

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lieberman '713.

Lieberman '713 discloses methods and apparatus as discussed above. The reference fails to explicitly recite recycling of ABS/AS blends or the production of magnetic recording products.

It is the position of the examiner that the disclosure of the reference of such broad varieties of polymers and mixtures of polymers along with the breadth of post-consumer products suitable for remanufacture renders obvious the limitations of claims 24 and 26.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward J. Cain whose telephone number is (571) 272-1118. The examiner can normally be reached on M-F from 10:00 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on 571 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

Art Unit: 1714

published applications may be obtained from either Private PAIR or Public PAIR.

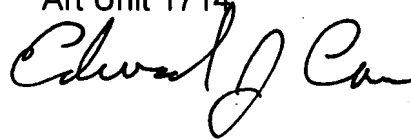
Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Edward J. Cain
Primary Examiner
Art Unit 1714

A handwritten signature in black ink, appearing to read "Edward J. Cain", is written over the printed name and title.